In the claims:

Please amend the claims as shown below:

1. (Currently amended) A method for dewatering and washing a lime mud ~~(106)~~ before dewatered lime mud is transported to a lime mud kiln, comprising: ~~(200)~~ ~~characterised in that the~~ dewatering ~~of~~ the lime mud ~~takes place~~ in a ~~pressurised~~ pressurized filter ~~(102)~~, ~~that the pressurised~~ connecting the pressurized filter ~~(102) is connected~~ to a closed gas circulation system ~~(101)~~, ~~that~~ connecting a filtrate tank ~~(108) is connected~~ to a ~~the~~ filtrate side of the pressurized filter and where a fluid level of filtrate ~~(109)~~ is established from the ~~pressurised~~ pressurized filter ~~(102)~~, ~~that the pressurised~~ pressurizing the pressurized filter, ~~(102) is pressurised in that~~ a compressor ~~(111)~~ drawing on ~~its~~ a suction side thereof a ~~draws~~ gas phase from the filtrate tank, ~~(108)~~ and a pressurized side of the compressor pressurizing, via the gas circulation system, a lime mud side of ~~pressurises~~ the pressurized filter, ~~(102) on the pressurised side of the compressor, on the lime mud side of the filter, that a certain~~ venting a pre-determined amount of the gas phase ~~is vented~~ from the gas circulation system ~~(101)~~, ~~and that~~ adding an equivalent pre-determined amount of fresh air ~~is added~~ to ~~the~~ a recycled gas phase to ~~with the aim of~~ maintaining ~~the~~ a partial pressure of oxygen gas above a pre-determined minimum level.

2. (Currently amended) The method according to claim 1,

~~characterised in that the~~ wherein a temperature in the pressurized ~~pressurised~~ filter ~~(102)~~, including a ~~the~~ temperature of the recycled gas phase, is maintained above 75°C~~, preferably 75-95°C~~.

3. (Currently amended) The method according to ~~either claim 1 or 2, characterised in that the~~ claim 1 wherein an amount of residual white liquor in the lime mud ~~(106)~~ does not exceed 10%~~, preferably under 5%~~, of ~~the~~ white liquor that is formed in ~~the~~ a previous causticization step.

4. (Currently amended) The method according to ~~any one of claims 1-3, characterised in that~~ claim 1 wherein the lime mud that has been filtered out from the lime mud is dry-fed out from ~~the~~ a disc filter for onward~~s~~ transportation to the lime mud kiln ~~(200)~~.

5. (Currently amended) The method according to ~~any one of claims 1-4, characterised in that~~ claim 1 wherein de-airing of the recycled gas phase is carried out on the pressurized ~~pressurised~~ side ~~(p)~~ of the compressor via a de-airing device ~~(113a), and in that~~ and an addition of fresh air is carried out by an air-supply device ~~(112a)~~ connected to the suction side ~~(s)~~ of the compressor.

6. (Currently amended) The method according to ~~any one of claims 1-4, characterised in that~~ claim 1 wherein de-airing of recycled gas phase is carried out on the suction side ~~(s)~~ of the compressor at a first distance from ~~the~~ an inlet to the compressor via a de-airing device ~~(113a), and in that~~ and an addition of fresh air is carried out through an air-supply device ~~(112a)~~ on the suction side ~~(s)~~ of the

compressor at a second distance from ~~the~~ an inlet to the compressor, where the first distance is greater than the second distance.

7. (Currently amended) The method according to ~~any one of the preceding claims, characterised in that the~~ claim 1 wherein an amount of recirculated gas phase that is exchanged lies within ~~the~~ an interval 5-20%~~, preferably less than 10%~~.

8. (Currently amended) The method according to ~~any one of the preceding claims, characterised in that the~~ claim 1 wherein an amount of recirculated gas phase that is exchanged is regulated such that ~~it~~ the amount depends on a detected process parameter.

9. (Currently amended) The method according to claim 8, ~~characterised in that~~ wherein the detected process parameter is the partial pressure of oxygen gas in the pressurized filter.

10. (Currently amended) The method according to claim 8, ~~characterised in that~~ wherein the detected process parameter is ~~the~~ a flow rate ~~of flow~~ of lime mud or dewatered lime mud, or parameters that are representative of these flow rates ~~of flow~~.

11. (Currently amended) The method according to ~~any one of the preceding claims, characterised in that~~ claim 1 wherein the pressurized ~~pressurised~~ filter is of ~~the~~ a disc filter type.

12. (Currently amended) An arrangement for washing and dewatering a lime mud before dewatered lime mud is transported to a lime mud kiln, comprising: ~~(200) characterised in that the~~ dewatering ~~of~~ the lime mud ~~takes place~~ in a ~~pressurised~~ pressurized filter ~~(102)~~, ~~that~~ arranging a recirculation line ~~110 is arranged~~ for a gas phase from ~~the~~ a filtrate side ~~to the~~ of a mud side, ~~that~~ connecting the ~~pressurised~~ pressurized filter ~~(102) is connected~~ to a gas circulation system ~~(101)~~ that is essentially closed, ~~that~~ connecting a filtrate tank ~~(108) is connected~~ to ~~the~~ a filtrate side of the pressurized filter and where a fluid level of a filtrate ~~(109)~~ is established from the ~~pressurised~~ pressurized filter, ~~(102)~~, ~~that~~ pressurizing the ~~pressurised~~ pressurized filter, ~~(102) is pressurised in that~~ a compressor ~~(111)~~ drawing on ~~its~~ a suction side thereof a ~~drawe~~ gas phase from the filtrate tank ~~(108)~~ and ~~pressurises~~ a pressurized side of the compressor pressurizing, via the gas circulation system a lime mud side of the pressurized filter, ~~(102) on the pressurised side of the compressor, on the lime mud side of the filter,~~ ~~that~~ venting a certain pre-determined amount of gas phase ~~is vented~~ from the gas circulation system ~~(101)~~, through a de-airing device~~s~~, ~~(113a)~~ and ~~that~~ adding an equivalent pre-determined amount of fresh air ~~is added~~ through an air-supply device~~s~~ ~~(112a)~~ to ~~the~~ a recycled gas phase with to maintain a ~~the aim of maintaining~~ ~~the~~ partial pressure of oxygen gas above a pre-determined minimum level.

13. (Currently amended) The arrangement according to claim 12, ~~characterised in that~~ wherein the de-airing device ~~(112a)~~ is

arranged at a position on the pressurized ~~pressurised~~ side (p) of the compressor, and in that the air-supply device ~~(112a)~~ is arranged at a position on the suction side ~~(s)~~ of the compressor.

14. (Currently amended) The arrangement according to claim 12, ~~characterised in that~~ wherein the de-airing device ~~(113a)~~ is arranged at a position on the suction side ~~(s)~~ of the compressor at a first distance from the compressor ~~(111)~~, and in that the air-supply device ~~(112a)~~ is arranged at a position on the suction side ~~(s)~~ of the compressor at a second distance from the compressor ~~(111)~~, where the first distance is greater than the second distance.

15. (Currently amended) The arrangement according to ~~any one of claims 12-14, characterised in that~~ claim 12 wherein a control unit ~~(140)~~ controls ~~the~~ regulator valves ~~(112), (113), (160) for at least one of de-airing and addition of air~~.

16. (Currently amended) The arrangement according to claim 15, wherein ~~characterised in that~~ the control unit ~~140~~ receives input signals from sensors ~~150~~.

17. (Currently amended) The arrangement according to claim 12 wherein the pressurized ~~any one of claims 12-16, characterised in that the pressurised~~ filter ~~(102)~~ is of a ~~the~~ disc filter type.